

ABSTRACT OF THE DISCLOSURE

An instruction decoding unit in a microcomputer is disclosed having an instruction word capable of being selected by a user to conveniently produce application software while maintaining security. The decoding unit in a microcomputer includes an instruction register for storing instructions fetched from a memory, an instruction decoder for decoding instruction codes of the instructions stored in the instruction register and for designating micro-instructions to be executed, a micro-ROM for outputting a series of the micro-instructions designated by the instruction decoder, and a user instruction selector for selecting or changing the micro-instructions of the micro-ROM in response to user's selection so as to change the operation of an instruction word.